

Honors Pre-Calculus

Polynomial Functions

Determine whether each of the following is a polynomial, and if not, explain why not.

1. $f(x) = 5x^{10} - 72x^{18} + 5x^5 - 72x^0$

2. $g(x) = 12x^3 - 7x^{-2} + 5x^1 - 72$

3. $i(x) = px^9 - \sqrt{5}x^2 + (-42)x^4 - 72x^{17}$

4. $h(x) = -9x^4 - x^6 + 4x^0 - 37x^{132}$

5. $h(x) = 9x^7 - x^{\frac{1}{2}} + 4x^4 - 8x$

6. $h(x) = 13x^{253} - x^{47} + ix^4 - 12x$

